

MCA
IMPACT RACING

DIRT TRACK RACING 2



EVERYONE
E
CONTENT RATED BY
ESRB



INFOGRAPHES

Dirt Track Racing 2

Introduction	3
System Requirements	3
Installing the Game	4
Dirt Track Racing Compatibility	4
Starting the Game	5
Options Editor	5
Navigating the Interface	5
Main Menu	6
Single Player Menu	6
Career Menu	7
Game Structure	8
Multiplayer	11
GameSpy	12
Options	15
Controls	17
Car Tuning	18
Car Upgrades	21
The Groove	23
Hints and Tips	23
Replays	24
Firewall Troubleshooting	28
Ratbag Sponsors	29
Credits	31
Technical Support (U.S. & Canada)	33
END-USER LICENSE AGREEMENT	34

Introduction

The only thing standing between you and victory is your nerve. Powering out of the turn, you see your opportunity. Taking it wide on the cushion, full throttle, nudging your opponent on the way through... you take the checkered flag. This victory in the final event of the series means you win the Ratbag Grand Nationals.

Welcome to *Dirt Track Racing 2* (DTR2), the much anticipated follow up to *Dirt Track Racing* and *Dirt Track Racing Sprint Cars*. Racing on tracks from shore to shore in the USA, experience the thrill of the door-to-door, mud-slinging action of DTR2. Featuring breakneck acceleration and spectacular collisions, DTR2 accurately recreates the experience of driving Pro Stocks, Late Models and hints at the future of dirt track racing with 'Concept' Modifieds. With 810 horsepower at your command, and a power-to-weight ratio that is second to none, you'll know that you haven't really raced until you've raced on dirt.

System Requirements

- Operating System: Windows® 98, Windows® ME, Windows® 2000, Windows® XP
- Intel Pentium® II 400 MHz or equivalent
- 64 MB RAM
- DirectX 8.0 compatible video card with at least 8 MB of RAM
- DirectX compatible sound card
- 200 MB of hard disk space
- 4 speed CD-ROM drive

Recommended System Requirements

- Operating System: Windows® 98, Windows® 2000, Windows® XP
- 800 MHz CPU or higher
- 128 MB RAM
- nVidia GeForce, ATI Radeon 32 MB
- DirectX compatible sound card
- 520 MB of hard disk space
- 8 speed CD-ROM drive
- DirectX compatible force feedback controller
- 56 Kbps or faster for Internet play

Multiplayer Requirements

Local area network with TCP/IP protocol or established Internet connection (56 Kbps modem or faster required). It is advisable to host a multiplayer game with a computer using the recommended system requirements.

Installing the Game

It is recommended that all other applications are closed before installing DTR2.

Place the DTR2 CD into your CD drive; the install process will be automatically launched.

If you do not have Autorun enabled, open the **Start** Menu, and click on **Run**. In the Command line, type **D:\SETUP.EXE** (Note, if the CD drive is a letter other than D, substitute that letter for D in the command line, for example: E:\SETUP.EXE)

There are three versions of DTR2 that can be installed. The **Minimum** installation will only transfer the core files to your hard drive and will require you to have the DTR2 CD in the drive during play. The **Complete** installation will give you access to all parts of the game; however, you will still need to insert the CD into the drive before launching the game. The **Multiplayer Spawn** installation of DTR2 will allow you to launch the game without the CD to join multiplayer LAN games only.

If you do not have the latest version of DirectX installed, the game installer will prompt you to do so. The game will not function unless you have DirectX 8.0 or later. Once you have installed DirectX, you will need to reboot your computer. The installation program will give you the option to do so.

If you experience a CRC Error when installing from the CD-ROM, copy the CD's contents onto your hard drive and run Setup.exe from your computer. This problem occasionally occurs on NTFS drives in Windows 2000 or XP, so installing onto a FAT32 partition may also help.

Dirt Track Racing Compatibility

DTR2 is the third game in Ratbag's Dirt Track Racing series. DTR2 is able to link up with your copy of the original *Dirt Track Racing* and the spin off *Dirt Track Racing Sprint Cars* to allow you to use the tracks from all three games in DTR2.

Note that the tracks from DTR and DTRSC are available only in Multiplayer mode, not when racing a Career or Quick Race. To race on DTR and/or DTRSC tracks in Multiplayer, all players must have the **Complete** installation of DTR and/or DTRSC on their machines.

Starting the Game

Insert the DTR2 CD-ROM into the drive and the DTR2 launcher application will start up. Click on **Play DTR2** to begin the game.

You can also start the game by opening the Start menu, selecting **Programs, Infogrammes**, then **Dirt Track Racing 2** from the submenu.

Alternatively, launch the game by (double) clicking on the DTR2 shortcut on your desktop.

Options Editor

DTR2 comes with an options editor that allows you to define certain options that come into effect when the game is launched. It appears on the Start menu as **Options Editor**, and will allow you to change certain settings that will take effect each time the game is started. This may help to overcome some problems experienced with particular systems. You may also use the editor to disable the introductory movies. You can start the Options Editor by opening the Start menu, selecting **Programs, Infogrammes**, then **Dirt Track Racing 2**, then **Options Editor** from the submenu.

Navigating the Interface

The DTR2 interface is navigated primarily with the mouse. Move the mouse cursor over the option you wish to select and press the left mouse button. The Escape (Esc) key can be used at most times to go back a page. The **Y** and **N** keys may also be used as shortcuts when a confirm box or dialogue box is open. In addition, keyboard shortcuts exist for all menu items, consisting of the first letter of the first word of the item. Where there are double-ups, the first letter of the next key word is used.

Main Menu

Single Player – Choose between Career and Quick Race.

Multiplayer – Play DTR2 against other human drivers.

Options – Configure your video, audio, game and input settings, or view the credits and sponsors of DTR2.

High Scores – View the times and best season earnings. Fastest lap times may also be reset here.

View Movies – Take another look at the game's introductory movie and view winning animations from your racing career.

Game Replay – Set your replay recording options or watch saved replays.

Exit – Quit back to Windows®.



Single Player Menu

Quick Race

Select Quick Race if you would like to race without career progression. This mode was designed to allow you to choose a track, the number and difficulty of opponents, a car, and then race without having to worry about money or following through a complete racing event. The AI Difficulty slider allows you to select the level of intelligence of your opponents and the Track Wetness slider allows you to adjust the traction levels around the track.

Enter your name and car number, and select the vehicle and skin of your choice. You can also load a car from one of your saved games.

Career

The heart of DTR2 lies within Career mode. In this mode, you start off as an amateur driver with limited funds. Your goal is to win the series and advance through the car classes. To do this, you need to purchase a car, participate in events from various series, using prize money to upgrade and improve your vehicle, later buying cars from different classes. Starting with Pro Stocks, you'll progress to Late Models until you race the fastest and most

extreme cars the game has to offer, the Concept Modifieds.

When starting a new career, enter your name and car number, and set the number of opponents against which you will race, their AI difficulty, the handling difficulty of your vehicle, and the length of the races in which you compete.

Selecting a smaller field of opponents may improve the game performance on slower computers. Shorter race lengths may make it more difficult for you to win an event, particularly when you are at the back of the grid – the style of racing offered in DTR2 means that it may take more than a couple of laps to work your way up through a tight field of competing drivers, even when you are racing well. A smaller field of opponents may be a wise choice if you decide to run the shorter length events. The downside of selecting a small field of opponents, however, fewer cars are promoted to the Mains.

Note that the difficulty you select the first time you play the game is only a default, and is overridden by the selections you make when commencing a career, or when adjusting the AI Difficulty slider in Quick Race mode. Note that handling difficulty may be altered at any time during a career in the Game Options menu. When you get used to racing at greater levels of realism, your times will be much faster than those you can achieve on the easier handling settings. Gradually increase the handling realism as your skills improve for the best results.

Career Menu

Race – Enter a new series, continue racing, or have a practice drive.

Car Options – Go to your Garage or visit the Speed Shop.

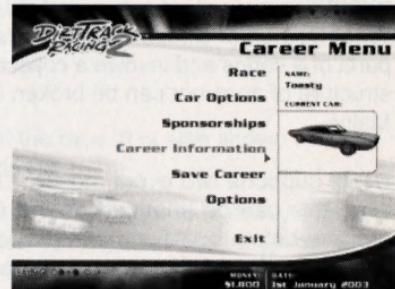
Sponsorships – Check for sponsorship offers.

Career Information – Check the Race Schedule, Points Standings or view your Career Highlights.

Save Career – Save your game to disk so that you can continue playing another time.

Game Options – Change your configuration for DTR2.

Exit – Quit from Career mode.



Game Structure

Series

Series are collections of events held throughout the year. Each event will award a certain number of championship points dependent upon your performance at that event. The total championship points awarded to you by the end of the year will determine your overall result for the series.

The series with the lowest prize money are the easiest. Race these to earn the money to upgrade your vehicle. Then you can enter the richer, more difficult series where the AI drivers race similarly upgraded vehicles.

While it may be tempting to upgrade your vehicle as much as possible before an event, be sure to leave yourself some spare money, just in case your vehicle is damaged during the race, and you need to perform repairs before you can continue. You may find it difficult to compete if your vehicle is badly in need of repair. Saving often is always a good idea in career mode.

At the beginning of your career you must prove yourself as a driver and gain a more powerful car to compete in the ultimate racing challenge, the Ratbag Grand Nationals series.

Events

When you enter a race in DTR2's career mode, you are entering an Event. Events form parts of a series and involve a collection of races that are held over one or more days. The structure of an event can be broken into several phases – Practice, Qualifying, Heats and Mains.

DTR2 supports two event modes – **Detailed** and **Brief**. The default mode is Brief; however, this can be changed on the Game Options menu. Detailed mode allows you to practice before qualifying and provides information on the results of all other Heats and Mains. Brief mode allows you to race without paging through the mass of information provided in Detailed mode. There is no practice before qualifying in Brief mode, but you can race quick 'Hot Lap' sessions before qualifying, if desired.

Practice – Practicing provides you with an opportunity to check how your car drives on each track before qualifying so that you can make last minute adjustments to tire pressure, tire compound and general car tuning. This phase is only provided in the Detailed event mode and you may skip it if you choose.

Qualifying – Your qualifying times determine your grid starting order for Heat and Main events. You may elect to skip qualifying, though if you do you will be assigned the lowest qualifying position and forego the chance to receive prize money awarded to the fastest qualifier.

Heats – You will be allocated a heat and placed on the starting grid according to reverse qualifying times. Unlike many other motor sports, heat grid positions are started in reverse order, with the fastest qualifier at the back of the grid to promote overtaking and more exciting race conditions. Heats are used to determine which Main race you are entered into.

Mains – Mains races are like final rounds. There are four Mains – A Main, B Main, C Main and D Main. Drivers are placed into a Main race based upon their qualifying and heat results. The top driver(s) from lower Mains are promoted to the next higher Main – eg if you win the C Main, you will be entered into the B Main race. Hence, if you drive well enough, it is possible to win the A Main no matter what Main you were originally allocated to.

When you enter an event in a series, you are not tied to that series for the rest of the year. Using the information from the race schedule and with careful planning, you may have a chance at winning two or more series in the same year!

Flags

Green Flag – The green flag is shown at the start of the race. It is also shown after yellow flags to indicate that it is safe to drive at full speed.

Yellow Flag – When a car is damaged so badly that it is no longer fit to drive, it must be taken off the track to prevent blockage of other cars. During this time, a yellow flag is shown and cars are forced to slow down and hold their positions. In DTR2, this is automated in that when another car is damaged, you will be towed along at an appropriate speed. You will regain control when the green flag shows it is safe to drive at normal

speeds again. A countdown (3-2-1) will be shown along with the yellow flag to warn you that control of the vehicle is about to be returned, and the race is about to restart.

White Flag – On the start of your last lap, the white flag is shown to indicate that you only have one lap remaining before you finish your race. The white flag will also be shown when one of your opponents wins the race, to indicate that you may only complete your current lap.

Black Flag – The black flag is shown when you have been disqualified for sustaining too much damage from colliding with other cars or objects around the track. The game will continue for a few more seconds (in which time you will not be able to control your car) then return you to the interface screen. The black flag will also wave when you have driven too far off the track, the wrong way around the track or taken a short cut. In this case, the black flag indicates that the current lap will not count.

Checkered Flag – The checkered flag is shown when you finish the race. When another car crosses the finish line first, you are allowed to finish your current lap only.

Sponsorship

Sponsorship is a source of income that is worth checking after each event. The number and value of sponsors that offer you money depend upon your performance in your races. Better race performances in higher series will attract greater sponsorship revenues.

When you accept a sponsorship, you will be tied to that sponsor for a certain number of events. You will *not* be able to accept the sponsorship of another company during this time.

When accepting a sponsorship offer, take into account not only the amount offered, but also the number of events to which a sponsor is willing to commit. If you have a major collision in a race when you are short on cash, you may be grateful for the extra event or two for which your current sponsor is still committed to you, even though another sponsor may have offered you more money for a single race. Alternatively, you may wish to choose sponsors that offer shorter contracts, in case you attract more lucrative offers sooner in your career.

Sponsorships are class specific. Sponsors will only take an interest in you once you have proven yourself racing a particular class of car. This allows you to have a separate sponsor for each class. As the series and events in which you perform will increase in value, so will your sponsorship offers.

Money

Money is a measure of success. In DTR2, you will receive money for Winning a Series, Placing in Mains, Placing in Heats, Fastest Qualifying time, Appearance money, and Sponsorship money.

You can use money to Purchase new cars, Purchase upgrades, Repair damage and Purchase tires.

Multiplayer

Multiplayer DTR2 enables drivers to compete against other players from anywhere around the world. With GameSpy support, finding other people to race against is a simple task. The in-game server Browser will list multiplayer games you can connect to, as well as details about the players on each server.

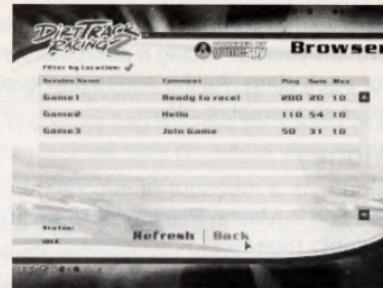
The multiplayer model used in DTR2 is a client-server model. This means that one person has to run the server and everyone else connects to that player's computer.

Remember that players' speed is affected also by the vehicle handling setting on the Game Options menu. Players with realistic vehicle handling settings will find it more difficult to control their cars; however, faster lap times are possible than with easy vehicle handling. Your level of vehicle handling may also be adjusted on the 'name entry' screen of the multiplayer interface, when connecting to or establishing a server.

A server will not allow two players with the same name or number. Identical player names will have a number attached to them for identification and identical numbers will be moved up to the next number that is not in use by another player.

GameSpy

An installer for GameSpy Arcade is included with DTR2. You can choose to run this installer during the DTR2 installation process, or by double-clicking on the executable file in the 'GameSpy' folder on the CD. GameSpy Arcade is an easy way to find multiplayer games of DTR2 on the Internet and an alternative to using the in-game server Browser. See the installer and its help files for more details.



Starting a Server

There are two ways to start a server – you can start one from within DTR2, or you can run a dedicated server separately. You cannot do both at the same time. Alternatively, you can launch Gamespy Arcade bundled with this program on the CD.

To start the server from within DTR2, click on 'New Game' under the Multiplayer menu. To setup a dedicated server, instead of starting DTR2, run the 'server.exe' included with the game. The dedicated server can be started by clicking **Start**, selecting **Programs** and then **Infogrammes** and select the DTR2 group. Within that group select the **Multiplayer Server**. In each case, you will need to type in a name and a description for your server.

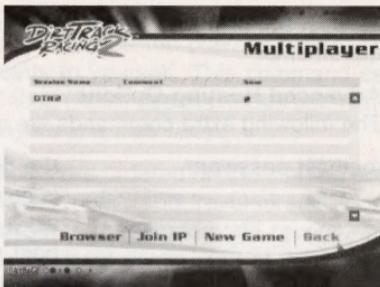
The results of all multiplayer races are stored in a file called 'results.txt' in the same directory as the server.exe. The dedicated server has a Results menu where you can enable or disable logging, clear the log file or view the results.

If people are having problems connecting to your server, you may have to try using a different port number. The dedicated server's configuration dialog has a separate field where you may enter a port number of your choice.

Connecting to a Server

The Multiplayer screen provides a list of detected local network servers in the table in the middle of the screen. Click on the name of the server to connect. If you wish to connect to a server that is not listed but you know its direct address, click 'Join IP,' then type in the IP of the computer hosting a DTR2 server.

Click on 'Browser' at the bottom of the Multiplayer screen to browse the list of Internet servers with GameSpy support. Sort the list of servers that appear on this screen by clicking on the headings (i.e. 'Session Name', 'Ping').



Connect to a server by clicking on a session name in the list. A screen will appear showing more information about the server and players connected to it. Click on 'Connect' to join the server. It is generally best to join the servers with the lowest pings, as these have the fastest response time and will provide better performance. You can filter servers by location to get one closest to you. Remember to click on 'Refresh' to update the list.

Watching a Game

If you are in the Multiplayer Chat Room while a race is running, you may watch that race by clicking on the **Watch** button. In Watch mode, you can change your view with the following controls:

Tab: Cycle through cars and to blimp mode.
Spacebar: Cycle through views for cars.

Blimp Camera controls

Mouse Rotate camera
Left Button Accelerate camera
Right Button Decelerate camera

Hosting a Game

The player that creates an in-game server or the first person to join an empty server will become the host. The host is the player responsible for selecting the track, number of laps, and various other options for the race. If a series is selected, the host cannot change the track mid series. The host also has the option to disconnect other people from the game by clicking on the player's icon in the host column.

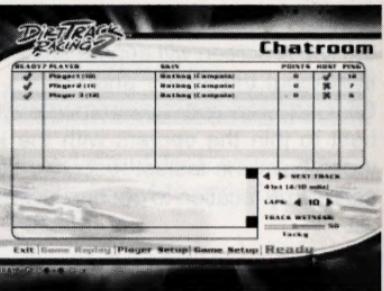
To host a multiplayer game you will need a slightly better system than the minimum requirements.

Advanced Hosting Options

The following extra commands are available in the chat room for more advanced players:

/gethost password

If a dedicated server is setup with a password, you may obtain host status with this command. Note that *password* is case sensitive.



/givehost ID

Transfers host status from you to someone else. The *IDs* are available through the listids command.

/listids

Provides a list of player *IDs* for use with the givehost command.

/setplayerlimit limit

Prevents more than *limit* players from joining the server (can be 1-10). This does not kick out existing players if there are already more than the limit. The limit is reset to 10 when the server empties of all players. This command can only be issued by the host.

/resetlimit

Resets the player limit to 10. This command can only be issued by the host.

/playerlimit

Displays the current player limit.

/resetpoints

Sets all currently connected player's points to zero. This command can only be issued by the host.

/setplayerpoints ID points

Gives player *ID* the number of points specified by *points*. This command can only increase the player's points, and you cannot assign points to yourself. This command can only be issued by the host. (Note, use the /listids command to print out a list of players and their IDs).

/setgridmode gridmode

Specifies the way the cars are ordered on the starting grid. Grid modes are 'random', 'rank', and 'reverserank' (don't include quotation marks). e.g. /setgridmode reverserank will make players with the least points start at the front of the pack. The grid mode is reset to random when the server empties of players. This command can only be issued by the host.

/gridmode

Displays the current grid mode.

/kick ID

Removes the specified player from the server. However, the player can connect again immediately. This has the same effect as clicking the kick button alongside the player in the chat room. This command can only be issued by the host.

/kickban ID

Removes the specified player from the server and prevents that player from connecting to the server again until bans are cleared or the server empties of players. You cannot kickban yourself. This command can only be issued by the host.

/clearbans

Allows any banned players to connect to the server again. This command can only be issued by the host.

Options

Video Options – These options allow you to tweak the visual appearance of the game. Selecting lower resolutions and disabling features can improve performance, although you should be aware that the game will not look as good. Some options are only available for specific video cards, eg high resolution textures are not supported on some older cards.

Audio Options – The audio options let you select the in-game sound effect volume and to toggle crowd sounds, announcers and game interface sounds.

The music volume slider adjusts the level of CD music playback. If you wish, after the game CD has been detected, you can remove it and insert your own music CD. By default, the game will play its own music while in the user interface, and play any audio CD in the drive during a race. If the interface music is turned off, the game will play audio CDs all of the time.

Game Options – The game options include the following:

Event Format – Detailed events include the practice phase and results for all other races.

Damage – *Simulation* is the highest level of damage. *Arcade* damage setting is more forgiving. Damage can also be completely disabled by selecting *Off*.

Transmission – Select Manual or Automatic transmission.

Vehicle Handling – The Vehicle Handling slider allows you to select between easy to realistic physics simulation models. The easy driving model provides extra traction and reduces the chance of spin out; however, the maximum power is slightly reduced. Full simulation mode is more difficult to control, but can provide faster results.

Auto Reversing – When enabled, the car is put into reverse gear automatically when the brake is held down.

Tire Wear – Disable this option to stop tire wear from being simulated during races. Note that tire wear is scaled to the race length you have selected, so you will have to conserve your tires even on very short events if you enable this option.

Yellow Flags – Yellow flags can be enabled or disabled.

Cockpit Jitter – This turns on the cockpit jitter that results from racing over the uneven dirt track.

Water Truck Movie – Disabling this option will prevent the water truck video from being displayed between the stages of an event.

Race Info – Disabling this option removes read-outs including lap times, race position and lap count information.

Tear-offs – Disabling this option will prevent mud splatter in game and remove the need to use tear-offs.

Car Tags – Disabling this option prevents the in game car tags (or position indicators) being displayed.

Input Options – The Input options allow you to reconfigure the in-game controls. To change the configuration, click on the name of the key you wish to reassign and press the key you wish to use. You can also set it to use the default keys, mouse or joystick controls.

The Force Feedback option box enables or disables force feedback. It is only accessible if your input device supports force feedback.

Controls

The default controls for DTR2 are as follows. Many of them can be reassigned on the Input options page.

Driving the cars

Action	Keyboard	Mouse	Joystick	Wheel
Turn Left	Left arrow	Move mouse	Move stick left	Turn wheel left
Turn Right	Right arrow	Move mouse	Move stick right	Turn wheel right
Accelerate	Up arrow	Left button	Push forward	Accelerator
Brake	Down arrow	Right button	Pull back	Brake
Change Gear Up	X	Keyboard X	Button 6	Button 6
Change Gear Down	Z	Keyboard Z	Button 4	Button 4
Change Camera View	Spacebar	Keyboard Spacebar	Button 5	Button 5
Half Lock Steering	Left Shift	Keyboard Left Shift	Button 3	Button 3
Look Left	[Keyboard [Button 1	Button 1
Look Right]	Keyboard]	Button 2	Button 2
Remove Tear-off	T	Keyboard T	Keyboard T	Keyboard T

In-Game functions

HUD toggle	F3
Rear view mirror toggle	F4
Screenshot (also functions in the interface)	F12
Quit	Escape Key

'Look' Function

A useful function in DTR2 is the ability to look left and right while driving. Late Model and Modified cars often slide deeply into corners, and you may find it useful to look to your side during cornering to see the cars in the pack around you. Hold the assigned key to glance in the desired direction, then release to return your view to normal. Note that while this 'look' function aims to simulate the type and range of movement available to a driver while in the cockpit, it is also available in the external views.

Steering Wheel

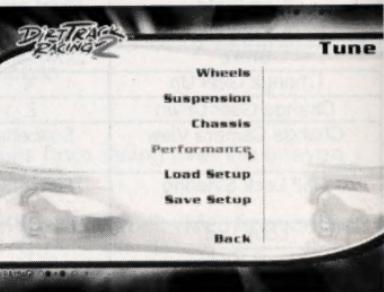
If you are playing DTR2 with a steering wheel, you may find it useful to calibrate the wheel first, so that the game responds correctly to your input. If you are having difficulty with the wheel, or any of its functions do not seem to be working correctly, it may be that the default setup is not appropriate for the wheel you are using. In this case, go through and manually assign the functions to the wheel. When assigning functions to a device such as a wheel, ensure that the device is centered, otherwise the axis that is off center will be recognized as the input you are attempting to assign.

Car Tuning

DTR2 allows drivers to modify their car configuration to improve performance and reduce lap times. A brief description of the various settings is listed in the following sections.

Wheel Tuning

Toe In/Out – Toe in/out is a measure of the angle of the wheels when the steering wheel is set to straight. In DTR2, most competitors put a lot of toe in on their right front wheel, so that the wheel



wedges in on the corners and helps it to turn better.

Wheel Offset – Wheel offset affects the distance between your wheel and the axle. Increasing your wheel offset will cause the tire to be moved along the axle, further away from your car. The back right tire usually has a greater offset than the other tires, providing a turning force to help the car corner to the left.

Tire Pressure – Tire pressure can be adjusted to vary the amount of traction. Tires at lower pressures provide higher levels of grip than tires at higher pressures; however they also run hotter, thus increasing wear. It is recommended that low-pressure tires are used on wet tracks and high-pressure tires are used on dry tracks.

Brake Strength – The brake strength of wheels can be tuned to make a large difference to your driving. When you brake, it is usually because you are entering a corner, or are going to run wide on a corner. If you tune your braking so that the left-hand side has more brake strength than the right, the car will naturally turn left under braking conditions. This will allow the car to 'set' into a slide when entering a corner or steer away from the wall if you are running wide on a corner. The default brake strength settings include some braking on the rear wheels, a little on the front left, and none at all on the front right.

Tire Size – Tire size affects the diameter of the wheels used. It can be used to control the stagger of a car. If the left-hand tires are smaller than the right hand tires, the car will have a natural lean to the left and be easier to turn in that direction.

Stagger – Stagger is the difference in circumference between the two rear tires of the car. The amount of stagger used varies depending on track size and conditions. Decreasing stagger may decrease grip, but tighten up handling.

Tire Compound – Your choice of tire compound is crucial, if you are to succeed in DTR2. Hard tire compounds provide less grip than soft tire compounds, but they are more resistant to wear. If the track is wet, you should use softer compound tires to get



maximum grip. If the track is dry, your tires will wear quickly, so you should fit harder compound tires.

Note: Different tire compounds must be purchased from the 'Parts' screen before they can be fitted to your car.

Steering Lock – Steering lock defines what angle your wheels are at when your input device is at full lock. This is most useful to a player who is using the keyboard or an analogue joystick, so they can specify what steering angle they want left or right to be. A larger steering lock is not realistic but will reduce the cars tendency to oversteer, making it easier to pull out of slides.

Suspension Tuning

Spring Strength – Lower spring strength will result in a lighter spring rate, which means the car will be less disturbed by any bumps in the road. A higher spring strength will cause a car to sit 'flatter' during hard cornering but may also cause the car to react to bumps in the road more violently.

Travel – Travel determines the range of movement allowed to the wheel in extending away from the car. This affects the ride height of the car and the position of its center of gravity.

Compression Rate – The compression rate is a measure of the damping (or slowing) of the suspension as the wheel moves toward the car. A larger value for the compression rate gives more damping in the shocks; a smaller value gives less damping. Compression rate and rebound rate are related and can be both adjusted to achieve a particular effect. After driving around a left corner, your car will normally be tilted with the left hand side of the car further off the ground than the right. If you decrease the bump dampening on the left tires, then the car should return to its level position more quickly.

Rebound Rate – This is the damping of the suspension as the wheel moves away from the car. Refer to 'compression rate' for more information.

Shock Type – This reports the type of shock setup you have on each wheel, based on the compression and rebound rates you have selected. A strong compression rate combined with a weak rebound rate results in an 'easy-up' shock, a weak compression rate combined with a strong rebound rate results in a 'tie-down' shock, compression rates

that match are referred to as a 'standard' shock, and other combinations are 'custom' shocks.

Chassis Tuning

Weight distribution – The Weight Distribution screen allows you to adjust the way in which the weight of the car is distributed over all four of its wheels. Weight distribution can greatly affect the handling of a car. Placing more weight over the back than the front will cause the car to lean back harder when accelerating, and lean forward when decelerating. Greater weight on the back wheels will increase acceleration, decrease the weight on the front wheels, reduce steering control and making cornering more difficult. Similarly, distributing more weight over the left-hand side of the car will make it easier to turn left than right.

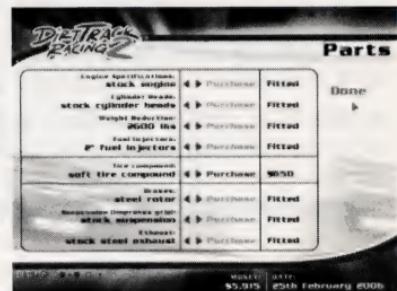
Generally DTR2 cars are asymmetrical in their weight distribution, and most have their weight skewed somewhat to the left-hand side of the car.

Performance Tuning

Drive Ratio – Selecting a higher drive (gear) ratio will increase your acceleration, but decrease your top speed. Changing your gearing for each gear will only affect that gear. As a general rule you should use higher gear ratios on short tracks, lower gear ratios on long tracks. Changing the gearing for the final drive ratio will affect all gears.

Car Upgrades

Each of the vehicle components in DTR2 has several performance upgrade levels. To upgrade a component, go to Parts in Car Options. Use the left and right arrows to select the component you want, and then click 'Purchase' once you have found the part you wish to buy.



Each component, along with its upgrades, is listed.

Engine Specifications – Here is where you buy a new performance engine for your car. The engine is

the most significant upgrade you can make to your DTR2 car, and this is reflected in its price.

Note: When you replace your stock engine, cylinder heads and weight reduction will have to be purchased for your performance engine.

Cylinder Heads –Your existing stock cylinder heads may be upgraded to modified or CNC modified cylinder heads. These increase the power output of your engine, offering greater acceleration and top speed.

Weight Reduction –The efficiency of your car may be increased not only by adding power, but also by decreasing the overall weight of the car itself. This is done by replacing some components with more expensive, lighter weight versions.

Fuel Injectors –Your existing 2" fuel injectors can be enlarged to 2", and then to 2" , to increase the power of your engine.

Note: The fuel injectors from your stock engine can be used on your performance engine and will only need to be purchased once.

Tire Compound –Your choice of tire compound is crucial, if you are to succeed in DTR2. Hard tire compounds provide less grip than soft tire compounds, but they are more resistant to wear. If the track is wet, you should use softer compound tires to get maximum grip. If the track is dry, your tires will wear quickly, so you should fit harder compound tires. Purchasing upgrade tires will enable you to tune your car with the appropriate tire compound for each race.

Note: Different tire compounds can be fitted in the wheels tuning screen once they have been purchased.

Brakes –The stock brakes fitted to your DTR2 car use steel rotors that quickly heat up under hard braking. Purchasing carbon-fibre or titanium coated rotors will ensure that you can brake much more effectively and for longer periods of time without the loss of braking power associated with overheating.

Suspension –Improving your suspension setup from 'stock' to either 'performance' or 'race' suspension will improve the performance of your DTR2 car enormously. While not directly increasing the power of your vehicle, upgraded suspension allows your car to better apply the power it has to the track surface, increasing the amount of grip and maneuverability at your disposal. To ensure that your car setup is balanced, be sure to upgrade your suspension if you are purchasing power upgrades. An over-powered car with stock suspension will find it difficult to achieve fast lap times, despite the money you've spent on increasing its power.

Exhaust –You may give more power to your engine and increase its efficiency by upgrading to lightweight or stainless steel exhaust systems.

The Groove

DTR2 simulates the development of 'the groove' in dirt track racing.

At the beginning of most events, a water truck will wet down the track. This makes the dirt or clay tacky and provides good traction on the track. As the cars race around the track, a groove is formed on the most common driving line. It is drier than the rest of the track, and becomes hard and slippery.

When the groove has developed, two other racing lines become competitive: 'The Cushion' - the longest route, on the outside of the Groove where tacky, looser dirt gives more traction. Less braking is required with this strategy but there is the risk of running into the wall.

'The Inside' - low on the inside of the track where, again, dirt still wet gives more traction. This strategy protects against overtaking but drivers must brake hard and if they get it wrong, can slide out onto the Groove and lose time.

Hints and Tips

Racing Lines

If you want to be the best, you'll have to find the right racing line. To clock fast lap times, you'll need to find a part of the track surface with some grip.

You'll usually find grip where there is still a bit of moisture in the track – either around the bottom near the inside berm, or up on the cushion at the top of the track.

The bottom line is always the fastest way around. You'll have to get good at using both feet on the pedals, as you won't be able to carry as much momentum through the corner as you would if you were running the top. This is where you have got to slow down to go fast.

The Cushion

The best place to find grip is up on the cushion, which is the moist dirt that builds up around the outside of the track as the racing surface develops. Be careful when running the cushion, don't go too wide or you'll end up in the marbles or, worse yet, into the fence. If you can find and run on the Cushion you'll really be able to stand on the gas.

Vehicle Tuning

It's hard to be competitive when the car is not set up right – tuning your vehicle is all-important. Having a good setup won't make you a better driver, but it will let you make the most of the skills that you have. Even the best driver will have trouble getting a 'Fast Lap' if their setup is not right.

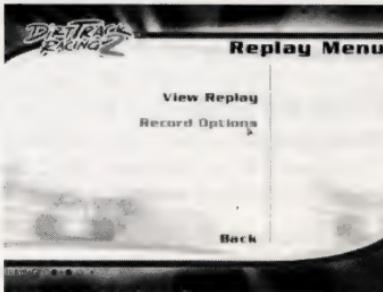
If your car is setup just right, your engine should be sitting within its most powerful rev range most of the way around the track, and you should be able to keep it pretty straight through the turns.

General

Sometimes sacrificing speed to avoid damage will pay off in the long run. If a part of your car is damaged you probably don't have to repair it immediately. This will save you money. For a real driving test, set damage to simulation and set tire wear on.

Replays

DTR2 provides two methods of viewing the action once the race is over. The first is instant replay, which can be viewed at any time during the race itself (except in a multiplayer race). At all times during the race, a number of seconds of previous action are recorded for playback. The time length of the instant replay can be configured in the replay options



screen. Instant replays may be viewed by pressing Escape (Esc) while in-game, and selecting 'Replay' from the menu. Pressing Escape (Esc) from within an instant replay will take you back to the same menu, where you can select 'Resume' to continue the race. If a long race is opened for instant replay and there is not enough memory available, a short portion of the replay will be loaded.

The second method by which you can review a race is to load a saved replay. Instant replays can be saved in-game, but entire races may also be saved after the race if the option is set in the options menu. The longer a race goes, however, the more memory it requires to view, so some low memory machines may have trouble.

When viewing a replay, you have a VCR-like console on the left that allows you to control the playback of the replay. The buttons on this console are as follows (from left to right):

Jump to Start – Sets the position in the replay to the start.

Reverse Play – Plays the replay in reverse from the current position.

Pause – Pauses playback at the current position.

Advance Frame – Moves one frame forward in the replay (only works while in pause).

Slow Motion – Plays the replay forward at half the normal speed.

Play – Plays the replay at normal speed.

Fast Forward – Plays the replay at twice the normal speed.

Jump to End – Sets the position in the replay to the end.

In addition to these buttons, there is a slider at the bottom of the panel. This indicates where in the replay you are. You may grab the slider with the mouse and drag it to any position in the replay. While grabbed, the slider will pause any playback.

The right panel provides several options on how to view the replay. A description of each button follows.

Save – Allows you to save the current instant replay. A cursor will appear prompting for a name for the replay. Use the tick and cross buttons that appear to confirm or cancel the save. It will prompt you again if a replay with that name already exists.

Autodirect – Selecting this button will make DTR2 control the camera to make an interesting coverage of the replay.

Cycle View – Switches to the next camera. Cameras include in-car, behind-car, spin camera, tow bar, and trackside TV cameras. In the spin camera mode you can rotate the camera around the car by holding Control (Ctrl) and moving the mouse. The left mouse button zooms in on the car; the right mouse button zooms out.

Cycle Car – Switches focus to the next car, in race position order.

Blimp View – This is a camera mode that does not focus on any particular car, but instead lets you fly to anywhere in the track to view the action from any vantage point, including from high above, in the grand stand, or right down on the track surface. Hold down Control (Ctrl) and use the mouse to move. The left mouse button accelerates the blimp; the right mouse button applies the brakes.

Note that the tracks from the original Dirt Track Racing do not include the trackside TV camera positions. You may still view, direct and save a replay from one of the Dirt Track Racing tracks, but there will only be one TV camera, and it will be in the same position as the camera that displays your victory lap when you have won an A Main race. The other cameras are all available on all tracks. Additionally, if you record a replay on a Dirt Track Racing track, that replay will only be viewable while Dirt Track Racing remains installed – a computer without Dirt Track Racing installed cannot be used to view a replay previously recorded in DTR2 on a Dirt Track Racing track.

Multiplayer Considerations

Due to the nature of multiplayer racing you cannot watch instant replays during a multiplayer race, as that would interrupt the race for other players. If you have the option set, however, the entire race will be recorded to disk for you and can be loaded via the normal replay loading menu. Saved multiplayer replays retain the names of the drivers displayed above

the cars to identify them. If a car drops out during a multiplayer race, the car similarly disappears in the replay. If you were following that car in the replay when it disappears, the viewpoint will automatically switch to the next car. If you yourself drop out of the race before the race has finished, you will not be able to view the remainder of the race, unless someone else sends you a complete replay of the race.

AVI Exporting

When you have made an interesting movie and want to create an AVI of it, you can use the export feature of the director, under the movie menu. This will render a movie in the current resolution, and with the current export frame rate and quality. It is recommended that a low resolution be used when exporting movies, such as 320x240. The reasons for this is that it takes more time to export each frame the higher the resolution, it takes more disk space, and playback of the AVI is often not as smooth with higher resolutions. The frame rate and compression quality, found in the replay options, will determine how good your AVI looks. High frame rate will result in smoother playback, but larger files. High compression quality will look better, but also make larger files. These are trade-offs you will have to make for the result you desire.

When the movie is being exported, no input is accepted. If you want to abort, however, press Escape. If you abort, the currently exported frames will be saved. The audio for the movie is recorded first, then each video frame, and finally the two are put together into an AVI file. There will be a momentary pause at the end of a large movie. The AVI will be found in the 'replays' directory with the same name as the replay it came from, but with a number appended to the end. This allows you to export multiple AVIs from the same replay.

Exporting Procedure

Using the Cutlist:

1. Select start when you want the section to begin.
2. Select end when you want the section to finish.
3. Select export. (The section will now play through twice as it exports sound and then visual content.)
4. Use Windows Explorer to access your replays folder.
5. Your exported section's file name will be (name of replay).avi

6. If more than one section is exported from the same replay the file names will be (name of replay)1.avi, (name of replay)2.avi, (name of replay)3.avi etc.

Saving Movies

The movie information is kept in the same file as the replay information, so you can only associate one movie with each replay file (but you can save in a different file). Saving works in the same way as with the ordinary instant replay.

Swapping Replays

Showing your friends one of your replays or replay movies is as simple as sending them a file. In the 'Replays' directory of your install directory will be a number of files corresponding to the replays you have saved or have received. If you have given them meaningful names you can select and send the relevant file. You may also rename the file (and use long names) to be more descriptive than the short in-game names provided. The receiving friend must put this file in their own 'Replays' directory to view your racing greatness through the normal load replay interface.

Firewall Troubleshooting

Running DTR2 behind a firewall complicates running both a server and client; it may take some trial and error. The following ports will need to be opened to allow communication between programs running locally and remotely.

The DTR2 **client** uses:

32270+ (incoming UDP)	Default client/server traffic
32241+ (outgoing UDP)	Default client/server traffic
28900 (outgoing TCP)	Gamespy server list traffic

Incoming UDP GameSpy query ports chosen by OS
Outgoing TCP game traffic port chosen by OS (from connect)

The DTR2 **server** uses:

32240 (incoming TCP)	Default accept port (clients connect to this port on the server)
32140+ (incoming UDP)	GameSpy query port (the GameSpy master server, GameSpy Arcade, DTR2 clients query this port)

32241+ (incoming UDP)
32270+ (outgoing UDP)
27900 (outgoing UDP)

Outgoing UDP GameSpy query ports chosen by OS
Incoming TCP game traffic port chosen by OS (from accept)

Notes

'incoming'

A process on the local host has created a socket bound to that port, and expects to receive messages destined to that port.

'outgoing'

A process on a remote host has created a socket bound to that port, and the local process will send data to that port.

'+'

Ports directly above that value can be bound instead, depending on what ports are already in use. 16 UDP client ports are bound but in practice only 10 are ever used. If a port is already in use the port number will increment until it finds a free one.

The client UDP ports for the server begin allocation from the accept port plus one up. For example, if the accept port is 15000, then the server will bind 15001 to 15016 inclusive for the client UDP ports, provided none of the ports are already in use.

Ports allocated by the operating system (OS) vary in value, but are generally low, around the 1000+ range. You may need to experiment with this.

Running DTR2 behind NAT (Network Address Translation) is another matter, and will require specific configuration. Refer to your NAT documentation.

Ratbag Sponsors

Bullseye Visual

3208 Village Drive
Kokomo, IN 46902
Phone: (765) 455-8669
<http://www.bullseyevisual.com>

Butler Built Motorsports Equipment

P.O. Box 459
 Harrisburg, NC 28075
 Phone: (704) 784-1027
<http://www.butlerbuilt.net>

Fast Track Racing

5540 Morehead Road
 Harrisburg, NC 28075
 Phone: (704) 455-1700
<http://www.fasttrackracing.com>

Gold Eagle Co.

4400 S. Kildare
 Chicago, IL 60632
 Phone: (800) 621-1251
<http://www.goldeagle.com>

John Davis Art / Speedway Impressions

1907 LaVista Drive
 Warsaw, IN 46580
 Phone: (574) 269-2827
<http://www.johndavisart.com>

Racing Optics

21728 Paseo Espade #1503
 San Juan Capistrano, CA 92675
 Phone: (949) 487-0604
<http://www.racingoptics.com>

Ron's Transmission

612 W. 3rd Street
 Grand Island, NE 68801
 Phone: (308) 381-1947

Shadow Graphics

312 Gasoline Alley
 Suite C
 Indianapolis, IN 46222
 Phone: (317) 481-9710
[Email: shadowgraphic@cs.com](mailto:shadowgraphic@cs.com)

Shaver/Wesmar Gear Drives

14502 South Lewis
 Bixby, OK 74008
 Phone: (918) 366-7311
<http://www.wesmarracing.com>

Speed Freaks Management

2029 Century Park East #900
 Los Angeles, CA 90067
 Phone: (310) 552-1777
<http://speedfreaks.tv>

Taylor Wings

3720 Omech Circle
 Rancho Cordova, CA 95742
 Phone: (800) 634-7757
<http://www.taylorwings.com>

Weld Wheels/Weld Components

933 Mulberry Street
 Kansas City, MO 64101
 Phone: (800) 788-9353
<http://www.weldracing.com>

Wertz Designs

103 Thomas Ave.
 Worthington, MN 56187
<http://www.wasmundracing.com>

Credits**Ratbag**

www.ratbaggames.com

Executive Producer	Greg Siegele
Technical Director	Richard Harrison
Producers	Robin Potanin Paul Murray
Lead Programmer	Chris Bevan
Art Director	Ben Toltoshev
Lead Artist	David Todd
Game Design	David Hewitt Kim Forrest
Programmers	Tim Auld Chris Bevan Richard Harrison Derek Long Roland Peddie Richard Sim Martin Valigursky
Artists	Paul Coad Michael Cooper Luke Dickson Stuart Mackenzie Szymon Mienik Paul Murray David Todd Ben Toltoshev Sonia Tyndale
Chief Technology Officer	Cameron Dunn
VP Marketing and Business Development	Mark Bracken
Marketing Art Director	Damien Thaller
Racing Technical Advisor	J.D. Kramer
Commentary	Ralph Sheheen
Music and Sound Design	Chris Tennent Roland Peddie
Video Editing Consultancy	Marty Pepper
Testing Manager	Amy Watson
Game Testers	Todd Hutchinson Kim Forrest Robin Parkyn
Project Management	Henrietta Child
Ratbag Title Animation	Rising Sun Pictures
Ratbag Title Animation Sound	Soundfirm

Infogrames

www.us.infogrames.com

Senior Vice President	Paul Rinde
Senior Vice President of Sales	Wim Stocks
Vice President of Marketing	Tracy Magnuson
Marketing Manager	Laslo 'xtreme' Nemesi
Marketing Director	Ann Marie Brand
Brand Manager	Jim Ferris
Senior Print Production Manager	Cherie Julkowski
Creative Director	Keith Anderson
Senior Graphic Designer	Dave Stengel
Director of Product Development	Peter Armstrong
Senior Producer	Brian Ewoldt
Associate Producer	Chris Lundeen
Lead Q.A.	Mike Hathaway
Testers	Sunnyvale Q.A.
Special Thanks	Steve Lundeen

Technical Support (U.S. & Canada)

Assistance Via World Wide Web

Get up-to-the-minute technical information at the Infogrames web site, at: <http://us.infogrames.com>. Through this site you'll have access to our **FAQ** documents, (Frequently Asked Questions) which contain our latest troubleshooting information. You'll have access to our **FTP** (File Transfer Protocol) area where you can download patches and new enhancements as soon as they become available, and an **E-Mail** area where you can leave us your tech support problems and questions if you do not find your answers in the **FAQ** information.

Help Via Telephone/Fax Or Mail In The United States & Canada

For phone assistance, call Infogrames Tech Support at **425-951-7110**. We have an **Interactive Voice Response** and **Faxback** system that is available twenty-four hours a day, seven days a week. If you should need live support, we are available Monday through Friday, 8:00 AM until 6:00 PM (PST). We ask that you do the following when calling: be at your computer; have your system information ready for our technicians, including system make and model; RAM; video and sound card data and drivers; and any screen error messages you've encountered and where (if not currently displayed on your screen. It will expedite your handling significantly. You may also fax in your Technical Support questions or problems to: **425-806-0480**, or write in your questions to the address below. The Dirt Track Racing 2 Technical Support Access number is 22701.

Product Return Procedures In The United States & Canada

In the event our technicians at 425-951-7110 determine that you will need to forward materials directly to us, please include a brief letter explaining what is enclosed and why. Make sure you include the Return Merchandise Authorization Number (RMA#) supplied you by the technician and your telephone number in case we need to call you. Any materials not containing this RMA# will be returned to you unprocessed. Your mail should be sent to the following address:

Infogrames
13110 NE 177th Place
Suite # B101, Box 180
Woodinville, WA 98072-9965
Attn: Technical Support
RMA#: (include your RMA# here)

Warranty Policy In The United States & Canada

If our technicians determine that the product storage medium is found to be defective within ninety (90) days of original purchase, (unless otherwise provided by applicable law), Infogrames will replace the item free of charge, to the original purchaser, if the item is accompanied by the original dated receipt and packaging. If you do not have the original receipt, or if the warranty period has expired, Infogrames will replace the product storage medium for a nominal fee.

©2002 Ratbag Pty Ltd. IMCA and the IMCA logo are registered trademarks of the Internation Motor Contest Association. All Rights Reserved. All other trademarks and registered trademarks are the property of their respective owners. Manufactured and marketed by Infogrames, Inc., New York, New York.

